

MINUTES
ALBEMARLE-PAMLICO ESTUARINE STUDY
TECHNICAL COMMITTEE
NOVEMBER 10, 1988

The meeting began at 10:00 a.m., chaired by Mr. Bruce Barrett. He welcomed a new Technical Committee member, Larry Minock, from the Virginia Council on the Environment, and a participant from EPA Region III, Charles App.

The agenda was revised allowing more time for hearing subcommittee reports, distribution of funding, early implementation, and the five-year work plan.

Minutes were considered. Bill Hogarth motioned for approval. Paul Wilms seconded. Ayes carried the motion.

I. Director's Report

A. Bob Holman reported that work has begun on all FY 88-89 funded projects.

B. The Annual Meeting was held on October 14-15, in Washington, N.C. Bob thanked all who made the event possible, especially the CAC Ad Hoc Agenda Committee. The meeting achieved three tasks: researchers review, roundtable discussion involving all committees, and informing the public of the Study's status.

C. The A/P Study exhibit was displayed at the State Fair. Between 150,000 and 175,000 people went through the NRCD tent at the Fair. The exhibit will be shown for two months at each of the three NC Aquariums starting with the Roanoke Island facility and ending at the Fort Fisher facility. This will begin November 9th and end on April 30, 1989.

D. Schedule of Yearly Activities -- Mr. Holman distributed a calendar of A/P Study committee activities for the upcoming year (Attachment A). He said that based upon the recent Annual Meeting and its excellent reception, there has been some discussion on having the meetings more frequently, possibly separating the technical and public issues into two sessions, and possibly having two roundtable workshops.

Mr. Barrett commended on the overall schedule, noting that some members would be required to attend mostly all of the meetings, making for extensive monthly travel. He questioned whether all the meetings were necessary. Ernie Larkin said that the Pamlico CAC determined a need to meet once a month because the meetings are at night, usually run quite late, and more meetings would enable them to consolidate issues and time. Sending a substitute to meetings was suggested as an alternative. Mr. Barrett requested having the Policy and

Technical Committee meetings back-to-back to minimize travel and attendance time. Mike Orbach recommended that the Technical, Policy and Citizens Committees should each decide separately on when they meet. The Technical Committee encouraged efficiency in dealing with the coordinating of meetings. Careful consideration should be given for increasing staff assistance in order to carry out committee directions. Bruce Barrett requested that the proposed roundtable meetings be held on conjunction with the Policy Committee meeting.

II. Public Participation

Joan Giordano put together a work plan which she presented to the CAC for consideration and review. This draft is included as Attachment B for Technical Committee review.

Ernie Larkin distributed CAC resolutions (Attachment C) on public participation and human environment funding levels, legislative liaison, priority action plans, and status and trends report. Regarding establishment of a legislative liaison, Dr. Ernie Carl asked if the TC should consider putting some legislators on the CAC. Larkin said it was not a bad idea, but the intent of the resolution is to get a formal liaison started.

Yates Barber noted that the CAC's were dissatisfied that effective BMP's were not in place in certain counties around Pamlico/Albemarle Sounds. He recommended that the CAC sponsor a letter to be sent to the Legislature encouraging cost sharing practices be put in place. He also was concerned that the calls for proposals that need to be done to fill in data gaps and complete needed inventories are not getting done. Dr. Carl cautioned that there is only so much that the A/P Study can do under the time and budget limits. He asked that the committees use caution in going to the legislature in ensuring that the priorities of the program are met. Dr. Stewart stated that as individuals, one might go to the legislature, but at the A/P Study, it should be a formal process. A/P Study must have a clear, priority driven direction when going to the legislature.

III. Data Management Subcommittee

Ted Bisterfeld reported that the most recent candidate for the data management coordinator had declined the position. Meanwhile, Karen Siderelis has been conducting the data survey to evaluate exactly what data and tasks are required. By February, Karen will need a person to begin those tasks. Mr. Bisterfeld said that if a contractor is hired in lieu of a coordinator, that it will cost two to three times the amount. The TC was urged to determine if there is a viable candidate within their organization. Mr. Barrett said that Karen should be congratulated on dealing with the A/P Study

data management needs and in keeping things moving under rather trying circumstances.

IV. Annual Meeting

Paul Wilms asked that the TC discuss their views of the recent annual meeting. Holman said that with only three A/P Study staff members, with three different committees involved, plus the public, that it is important to consider contracting the meeting out the next time. Mark Alderson had noted that it was one of the best exchanges of CAC's he had seen in the National Estuary Program. Herb Austin had reported that to do a proper technical review, that there needs to be more technical reviews and more information prior to the meeting. It was suggested that the next meeting separate issues--perhaps having a separate peer review meeting directly before the meeting. The committee asked Bob Holman to put ideas on paper on more productive ways to improve the coordination processes for both peer review and the annual meeting.

Larry Minock said that he believes the A/P Study could be better served through a cross-fertilization of ideas. Perhaps he could arrange a meeting (i.e. in Richmond) to exchange technical information with Chesapeake Bay researchers on fisheries issues. Bob Holman was asked to follow-up on this idea.

V. Early Implementation

Ted Bisterfeld reported that the additional money that the A/P Study had received over and above their original budget was in jeopardy. This was because a project slated for early implementation funding had been withdrawn due to lack of agreement on an appropriate study site. As a result, another project must be found quickly, in order not to lose Federal funding. An idea of EPA Region IV is to encourage Virginia to participate in a cooperative effort on the Currituck Sound to include both North Carolina and Virginia. If Virginia is selected to participate, then Virginia would be asked to participate in the cost-sharing of federal funding.

Motion: Barrett noted there is discussion on the table to approve a joint non-point project with Virginia/North Carolina. TC is to approve funding. Wilms moved to approved the concept, but with the stipulation that the project itself be submitted to the TC for final approval, and that the concept be sent to the PC for approval as well. Sides seconded. Ayes carried.

VI. Future Funding

Mike Orbach stressed the need to have a clear understanding of human environment and public participation as two separate

issues. In the past, human environment was overlooked in funding due to uncertainty as to the appropriate category of review. Dave Owens noted that the A/P Study must move away from information acquisition to implementation and public activities. It was stressed that more money should go to human environment and public participation and that sufficient time for adequate proposals should be allowed. The public participation subcommittee would review the human environment and public participation components of proposals to allow for appropriate consideration of categories.

Motion: Wilms moved to set up as a target at least 10% and perhaps up to 20% of the funds toward public participation. The 20% increase would mean a subsequent decrease in the information acquisition category. Turner seconded the motion. A vote was taken 7 for and 4 opposed.

VII. Status and Trends Report

The concept paper for conducting a status and trends scoping report was brought to the table. The concept was brought to the committee by Dr. Copeland at the last TC meeting and at the Annual Meeting.

Motion: Mike Orbach recommended that the PC approve spending \$78,000 for the STR concept as proposed by Drs. Copeland and Stewart with the additional provision that their report include a component on "probable cause." Yates seconded. Ayes carried.

VIII. Mr. Turner distributed a paper listing the various categories for CFP inclusion and funding. Each committee member was asked to vote on the priority for each category. Mr. Turner was to tally the sheets and use it as guidance when soliciting Calls for Proposals (CFP).

The meeting adjourned at 3:30 p.m.

ALBEMARLE-PAMLICO ESTUARINE STUDY SCHEDULE - 1988/1989
 NOVEMBER 1, 1988

Attachment A

<u>Date</u>	<u>Event</u>
November 7-9, 1988	CAC Meetings to Review Proposed Project Area Needs
November 10, 1988	Technical Committee Meeting to Review Proposed Project Needs
November 14, 1988	Develop Call for Proposals
November 18, 1988	Issue Call for Proposals
November 29, 1988	Policy Committee Meeting
January 13, 1989	Review of Proposals (submittal due date)
February 7-9, 1989	CAC Meetings to Evaluate Specific Proposals
February 21, 1989	Technical Committee Meeting to Consider Subcommittees' Proposal Recommendations
February 27, 1989	Policy Meeting to Consider Technical Committee's Proposals and Annual Budget Recommendations
March 3, 1989	Return Selected Proposals to Authors for Revisions
March 17, 1989	Revised Proposals to Director/Subcommittees
April 7, 1989	Final Proposals to EPA for Approval
*April 14, 1989	Roundtable Meeting of All Committees
April 24-26, 1989	CAC Meetings
May 10, 1989	Technical Committee Meeting
May 17, 1989	Policy Committee Meeting
July 1, 1989	Projected EPA Award of Funding
August 7-9, 1989	CAC Meetings
August 22, 1989	Technical Committee Meeting
August 29, 1989	Policy Committee Meeting
*September 14, 1989	Annual Researchers Review Workshop
September 19, 1989	Technical Review Subcommittee Meeting
*September 29, 1989	Roundtable Meeting of All Committees
*October 6, 1989	Annual Public Meeting
October 10, 1989	Develop Call for Proposals
**October 25-27, 1989	CAC Meetings
**November 7, 1989	Technical Committee Meeting
**November 21, 1989	Policy Committee Meeting

*New scheduled events for discussion
 **New committee meeting dates (assign one year in advance)

Public Involvement Plan

Introduction

What is public participation? Public participation, in the context of the Albemarle-Pamlico Estuarine Study, means involving citizens in the decision-making process.

Informing and involving the public and getting its support can be a most difficult undertaking, yet it is the cornerstone of a successful and effective public participation program. Needless to say it is essential to the development and implementation of the Comprehensive Conservation Management Plan (CCMP). This plan is the collaborative problem-solving process in which key members of the public need to be fully initiated. The desired long-term improvements in the estuary resulting from the CCMP will undoubtedly affect the daily life of all citizens. Their input and consensus are vital if the CCMP is to be implemented successfully.

Everyone in the basin needs to understand his role as a user of the estuary. Because so much is at stake, full program commitment into designing and executing an effective public participation plan is indispensable.

Goal

The goal of public participation is to establish the public consensus that will ensure long-term support and implementation of the CCMP.

Public consensus must be achieved (at least) during two phases: first when priority problems are identified and second, when solutions and action strategies for

implementation are selected and adopted. Consensus signifies substantive agreement among four component groups: elected officials, environmental managers, scientists and the public. These groups must concur on what is technically well-founded, feasible, fair and likely to succeed.

Consensus also implies the willingness of participants to work together and to compromise. When consensus is not able to be achieved or when consensus is counter to regulation, agencies will need to carry out their legal responsibilities.

The public must have relevant, timely and accurate information if it is to achieve consensus. To participate intelligently in the decision-making process the public must be well-informed. The essential components of a basic public participation program should include:

- *an experienced staff person
- *a comprehensive mailing list
- *a general program slide show
- *a written information piece: newsletter, news-bulletin or fact sheet
- *public meetings
- *a defined role for the citizens' advisory committees
- *local government liaison network

The seven elements are neither expendable nor interchangeable. They are the foundation of the public participation plan.

Staff Person

The public participation coordinator serves in a pivotal capacity because of her responsibility for the public participation plan and her interaction with all kinds of citizens and organizations. Public speaking and writing skills are necessary for adequate discharge of duties. A good listener as well, this person must be able to convey citizens' concerns to program administration. Sensitivity to the biases of various interest groups and an ability to put those biases into perspective, while remaining neutral, are essential qualities. Understanding the workings of government as well as the problems of the estuary are helpful. The public participation coordinator also provides support to other estuary managers in dealing effectively with public groups and the media.

Comprehensive Mailing List

It is essential to know who constitutes the public for our estuary. Creating a representative, accurate mailing list of organizations and people and identifying target audiences, lays the groundwork for information and participation activities. Included should be:

- *Conservation and environmental organizations
- *Service and civic groups
- *Recreational boating clubs
- *Commercial and recreational fishing associations
- *Real estate firms and developers

- *Agricultural businesses and farm groups
- *Seafood packers and marketers
- *Chambers of Commerce, business and industry
- *Shippers and port related groups
- *Local government elected officials
- *Federal and state legislators
- *Federal, state and local agency officials
- *Scientists and educators
- *Media - print, radio & T.V.

This listing should be computerized. Coding and software that permits sorting by both geographic area and interest groups will exploit potential of the mailing list greatly. Assembling a list of names is not enough, however. Personal contact with interest group leaders, media representatives and key legislators and officials is fundamental to success of the public participation program. Initiation of contacts will sometimes be the public participation coordinator's responsibility. Creation of opportunities for communication between other program personnel and target groups is helpful. Staff also needs to keep participants informed about work progress during the course of the program. Public meetings, a slide show and a basic information paper (newsletter) are essential tools to initiate and maintain contact with target audiences.

General Program Slide Show

A picture is worth a thousand words. We have accomplished

the production of this very useful educational tool. It is ready for use by CAC members. The advantage of the slide show is that it ensures consistency in the delivery of the Albemarle-Pamlico Estuarine Study message regardless of the presenter. Also the slide show can be tailored to a specific audience (i.e. boaters, fishermen, etc.) by adding a few slides.

A Written Information Paper

Because information fuels the public participation program, misinformation or uninformed people cannot participate effectively. Our goal is to capture public attention. Newsletters, bulletins and fact sheets are good choices. We are on our way in this area.

Public Meetings

There are two types of public meetings:

- 1) regularly scheduled meetings of organized groups to which we are invited to speak, and
- 2) meetings we organize.

The wiser allocation of time is, by far, a benefit of utilizing the former. Attendance at dozens of meetings can be accomplished in the time it takes to organize our own. By meeting others on their own turf the importance of that group's participation in the APES program can be reinforced. Outreach potential is substantially broadened. A goal should be to meet with 2-3 groups within each of the categories targeted for our mailing list.

Citizens' Advisory Committee

Ensuring direct citizen involvement in the policy-making process is the reason for the creation of the Citizens' Advisory Committees (CACs). A clear charge for the CACs, what its purpose is and how it functions, must be established. The CACs primary role is to help see that the public participation goal is met and that, through public consensus, long-term support for the Comprehensive Conservation Management Plan implementation is assured.

Other specific functions of the CACs include:

- *Help establish program goals and objectives
- *Help set funding levels
- *Assist with public participation activities
- *Help communicate program activities to user groups
- *Comment on research priorities
- *Review technical findings and analyses
- *Help develop implementation plans

Local Government Liaison Network

An outgrowth of the Citizens' Advisory Committees can be the Local Government Liaison Network, especially given the keystone role of local government in land-use control. The idea is to provide a straightforward mechanism for communication (comment and criticism) from local governments to the Albemarle-Pamlico Estuarine Study, and for dissemination of information from the study to local governments. Similarly, local governments should be able to

benefit significantly by simply knowing of actions planned or anticipated by neighbors.

Key to this public involvement plan is adequate funding and staffing. The suggested plan includes activities which may need to be funded and conducted by participating agencies, private organizations, foundations or which may need to be accomplished through the APES grants process. In any case, the above is submitted as a suggestion, a place to begin, and something upon which to build a comprehensive, workable plan.

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Public Involvement Plan

I. Public Education and Information

A. Printed materials

- 1) newsletter
- 2) fact sheet
- 3) brochures
- 4) articles
- 5) press releases

B. Non-print media

- 1) oral presentations
 - a) civic groups
 - b) public programs
- 2) film/videos/slides
- 3) t.v.
- 4) radio
- 5) CAC meetings

C. Special Events

- 1) workshops
- 2) annual review meeting
- 3) press conferences
- 4) exhibits

D. Mailing List

- 1) see listing in body of plan

II. Public Participation - Hands-On

A. CAC meetings

- 1) field trips

B. Citizens Monitoring

C. Youth projects

- 1) planting sea grasses
- 2) clean-up
- 3) project contest

D. Festival

III. Local and State Government Liaison Network

- A. Workshop for state and local officials
 - 1) bring together key APES participants and public officials
 - 2) hear research presentations
 - 3) present examples of APES-related projects being conducted at state and local levels

- B. Formation of state level caucus
 - 1) representatives and senators - APES area
 - 2) hold public hearings
 - 3) propose legislation

- C. Coalition of coastal communities



RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE
ALBEMARLE PAMLICO ESTUARINE STUDY

PUBLIC PARTICIPATION AND THE HUMAN ENVIRONMENT

Public awareness and involvement is critical to the ultimate success of the Albemarle Pamlico Estuarine Study and to the adoption and implementation of a Comprehensive Conservation and Management Plan. Research on public attitudes toward management alternatives and public response to education, incentive, and regulation programs is essential to structure and implement an effective public involvement program. Currently, ten percent of annual program funds are earmarked for public participation and approximately ten percent for research on the human environment. As the program enters its third year, no proposals for research to examine public attitudes and responses to various management alternatives have been funded.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy Committee amend the Albemarle Pamlico Estuarine Study Work Plan to earmark twenty percent of annual program funds for public participation projects. The existing allocation of ten percent of annual program funds for research on the human environment should be retained. The PCAC further resolves that the Policy Committee direct the Citizens' Advisory Committees to prioritize and recommend for funding within available funds proposals for public participation and for research on the human environment subject to the review of the Public Affairs Subcommittee of the Technical Committee.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE
ALBEMARLE PAMLICO ESTUARINE STUDY

LEGISLATIVE LIASON

The support of the General Assembly of North Carolina is necessary both for the on-going research and programs of the Albemarle Pamlico Estuarine Study and for the implementation of the Comprehensive Conservation and Management Plan. It is critical to the success of the program that a structured liason with the General Assembly be developed as soon as possible.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy Committee be requested to explore the development of a formal liason with the North Carolina General Assembly. Alternatives include formation of a Legislative Liason Committee composed of local citizens and elected officials from the study area and the establishment or continuation of special study committees by the General Assembly.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE ALBEMARLE PAMLICO ESTUARINE STUDY

PRIORITY ACTION PLANS

The Policy Committee of the Albemarle Pamlico Estuarine Study has resolved that the principal goal of the APES is to provide the scientific knowledge and public awareness needed to make rational management decisions so that the Albemarle-Pamlico estuarine system can continue to supply citizens with natural resources, recreational opportunities, and aesthetic enjoyment. In some areas, adequate scientific knowledge and public awareness exists to support specific actions to maintain, and where necessary restore, the chemical, physical, and biological integrity of the estuary, the wildlife habitat of the estuary, and the production levels of recreational and commercial fisheries of the estuary.

The Environmental Protection Agency in administering the National Estuary Program provides funding to designated programs for implementation of Priority Action Plans prior to the development and adoption of a final Comprehensive Conservation and Management Plan. The Technical Review Subcommittee of the Technical Committee has recommended that management plans for small areas be developed and utilized as forerunners to the comprehensive plan. Although some specific early implementation projects have been outlined, the APES has not adopted a Priority Action Plan to date.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy and Technical Committees consider and adopt and seek necessary early implementation funds to implement the following Priority Action Plans. The Committee further resolves that the representatives of the PCAC on the Policy and Technical Committees submit this resolution for consideration at the next meeting of the respective committees.

1. TAR-PAMLICO RIVER NUTRIENT CONTROL PLAN. The APES should develop in concert with the Division of Environmental Management and the Environmental Management Commission a nutrient control plan for the Pamlico and Tar Rivers. The plan should include the designation of the rivers as nutrient sensitive waters and the control of both point and non-point sources of phosphorous and nitrogen.

2. CURRITUCK SOUND/BACK BAY AND LAKE MATTAMUSKEET/HYDE COUNTY LAND AND WATER MANAGEMENT PLANS. The APES should develop and implement comprehensive land and water management plans for the waters and adjacent basins of Currituck Sound/Back Bay and Lake Mattamuskeet/Hyde County. A comprehensive plan currently exists for Back Bay and a proposed early implementation project has been proposed for Hyde County. The comprehensive plans should implement protection of productive agricultural lands and wetlands and implementation of water management and other land management practices necessary to maintain and where necessary restore the quality and productivity of estuarine waters.

3. CRITICAL AREAS PROTECTION PLANS FOR WETLANDS AND PRIMARY NURSERY AREAS. The APES should designate wetlands and primary nursery areas as critical areas and develop and implement protection plans for these areas. Primary nursery areas are currently defined, identified, and mapped by the North Carolina Division of Marine Fisheries. Wetlands are currently identified and mapped by the U.S. Fish and Wildlife Service under the National Wetland Inventory and regulated by the Environmental Protection Agency and Corps of Engineers under Section 404 of the Clean Water Act.

The Critical Area Protection Plan for Wetlands should include a clear declaration that wetlands are waters of the State and the adoption and implementation of standards to protect wetlands under the existing water quality standards program. In adopting State standards to protect wetlands, the Environmental Management Commission should consider adoption by reference of the EPA guidelines for evaluating wetland fills and implementation of declassification procedures for activities which result in the loss of wetlands outside the current permitting process under Section 404 of the Clean Water Act.

The Critical Area Protection Plan for Primary Nursery Areas should include the designation of all primary nursery areas as outstanding resource waters and the adoption and implementation of a no water quality degradation standard through the existing water quality standards program. Additional plans to restore designated or potential primary nursery areas currently impacted by runoff or pollutants should be developed and implemented on a site-specific basis.

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE
ALBEMARLE PAMLICO ESTUARINE STUDY

STATUS AND TRENDS ASSESSMENT AND REPORT

The State/EPA Conference Agreement for National Estuary Program designation under the Water Quality Act of 1987 commits the APES to products and schedules which include a report assessing the status and trends of priority environmental concerns. Priority environmental concerns identified in the existing APES Work Plan include declines in fisheries productivity, ulcerative sore diseases, eutrophication, habitat loss, shellfish closures, and toxicant effects. The Conference Agreement requires that the Policy Committee identify the probable causes of the trends in environmental concerns by June of 1989, seven months from this date. This identification of the probable causes of environmental concerns is to be derived from the assessment of the status and trends of identified environmental concerns.

If the Policy Committee is to identify the probable causes of environmental problems and if the program is to meet its obligations under the State/EPA Conference Agreement, it is critical that an assessment of the status and trends of priority environmental concerns be initiated immediately and expeditiously completed.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that existing cooperative agreements be utilized, in combination, to develop a status and trends assessment of each of the identified priority environmental concerns. The APES has existing cooperative agreements with institutions for research and data assimilation for each of the identified priority environmental concerns (e.g., NMFS and DMF on fisheries productivity and habitat loss, USGS on water quality trends). To avoid duplication and to secure the necessary assessment in the most expeditious manner, the EPA or APES should contract under these existing cooperative agreements for status and trends assessments for each of the identified priority environmental concerns. A contract should also be executed with an appropriate institution or individual for editing and publishing of the draft and final report. Alternatively, program staff could edit and publish the report.

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4. POINT SOURCE MANAGEMENT PLAN. The APES should develop and implement an integrated point source management and compliance plan for the study area. This plan should examine compliance with final effluent guidelines and water quality standards, monitoring, pretreatment programs, and enforcement with respect to all major and minor municipal and non-municipal dischargers in the study area and implement necessary corrective actions.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

The status and trends assessment and report should as described in the Conference Agreement "assess trends in water quality, natural resources, and uses of the estuary." Assessment of the status and trends of information management and public participation, while of interest, should not be a part of the required assessment and report under the Conference Agreement.

It should be recognized that the value of assessing the status and trends of priority environmental concerns and the identification of probable causes of environmental problems lies as much with the process as with the publication of the report. It is important that this process begin immediately and proceed with the full and active involvement of all APES committees.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

APES
 Technical Committee
 November 10, 1988

<u>Name</u>	<u>Organization</u>	<u>Phone #</u>
David W Sidas	Soil + water - NRCD	733-2322
Jim Stewart	Water Resource Res Institute	737-2815
Harry Moore	Univ of Tenn on the Environment	800/716-4500
Bill Cole	U.S. FWS	726-1026
Bill Agarth	NRCD - Div. Marine Fisheries	726-7021
Charles App	EPA - Reg. 3	215-597-8242
Harrel Johnson	Div. of Marine Fisheries	284-3911
B J Copeland	UNC Sea Grant	737-2454
Don Hoss	NOAA Fisheries	(919) 728-8746
Yates Barber	albemarle CAC	(919) 338-3557
Ernie Parkin	Tamlico CAC	551-4485
W. R. O'Connell	W. R. O'Connell	252-4552
RICHARD B HAMILTON	WILDLIFE RESOURCES COMM	3-3391
Jim Turner	USGS	919-856-4510
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